

# **COMBINATION STORAGE BOX**

## **BACKGROUND OF THE INVENTION**

### **1. Field of the Invention**

**[0001]** The present invention relates generally to a combination storage box, particularly to a foldable combination storage box to be placed in an ice bag or ice barrel.

### **2. The Prior Arts**

**[0002]** In an average ice bag or ice barrel, there is usually a storage box arranged to serve as a thermal layer for insulating heat (keeping food or beverage warm or cold) and for fixing bottles at places on the other hand.

**[0003]** Unsatisfactorily, as the storage box so far, such as an ice barrel for angler, is largely plastics-molded, it is somewhat bulky and heavy for carrying.

## **SUMMARY OF THE INVENTION**

**[0004]** The primary object of the present invention is to provide a combination storage box of high portability to be disposed in an ice bag or ice barrel for storing foods and the likes.

**[0005]** Another object of the present invention is to provide a combination storage box, which is foldable for saving space when carrying.

**[0006]** For realizing the objects mentioned, a combination storage box of the present invention is comprised of a base and an enclosing wall set, in which the base has a peripheral groove, a bottom edge of the enclosing wall set has a plurality of insertion portions provided with respective buckling protrusions and the bottom edge of the enclosing wall set is correspondingly disposed with respect to the periphery of the base so that the buckling protrusions of the insertion portions can be inserted properly in the groove of the base.

[0007] For more detailed information regarding advantages or features of the present invention, at least an example of preferred embodiment will be described below with reference to the annexed drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The related drawings in connection with the detailed description of the present invention to be made later are described briefly as follows, in which:

[0009] Figure 1 is an exploded view of a combination storage box of the present invention;

[0010] Figure 1A is an enlarged view of part A of Figure 1, viewed from another angle;

[0011] Figure 1B is an enlarged view of part B of Figure 1, viewed from another angle;

[0012] Figure 2 is an assembled sectional view of the present invention; and

[0013] Figure 3 is a schematic view showing an enclosing wall set of the present invention under folded state.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0014] As shown in Figure 1, a combination storage box constructed in accordance with the present invention is comprised of a base 1 and a foldable enclosing wall set 2, and is integrally molded with plastics in a preferred embodiment.

[0015] The combination storage box is characterized in that a groove 11 is formed peripherally around the base 1 as illustrated in the enlarged views of Figures 1A and 1B. A plurality of insertion portions 21 is formed peripherally around the bottom edge of the enclosing wall set 2, in which a buckling protrusion 210 is provided to each insertion portion 21. The bottom edge of the enclosing wall set 2 is formed correspondingly with the peripheral edge of the base 1 so that the buckling

protrusions 210 of the insertion portions 21 can be properly inserted in the groove 11 of the base 1. Figure 2 shows that the base 1 and the enclosing wall set 2 are jointed tightly in a concavo-convex combination after an assembling is made.

[0016] In a preferred embodiment shown in Figure 1A and 1B, a thickness T is formed between the groove 11 and the edge of the base 1, and a width W between the buckling protrusion 210 and the edge of the enclosing wall set 2, where T is substantially equal to W such that the base 1 and the enclosing wall set 2 can clasp each other closely as indicated in Figure 2.

[0017] Since an ice bag or ice barrel is generally shaped as a longitudinal square body, therefore, the enclosing wall set 2 of the present invention is sustained as a longitudinal square pillar and the base 1 as a rectangular seat, both are receivable on an inner layer of an average ice bag or ice barrel. However, this example regarding the dependent relationship of shapes will not limit the scope of the present invention, the enclosing wall set 2 and the base 1 could be combined to form a cylindrical body, for instance.

[0018] Also, for the sake of promoting portability, the enclosing wall set 2 could be folded flatly while the insertion portion 21 could be expanded to form a plane.

[0019] The present invention is advantageous in package space, portability, and easy assembling, and in addition, good in thermal insulation.

[0020] In the above described, at least one preferred embodiment has been described in detail with reference to the drawings annexed, and it is apparent that numerous changes or modifications may be made without departing from the true spirit and scope thereof, as set forth in the claims below.